

HW: 1-10 Due 5/19, 11-20 Due 5/20

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation by factoring.**

1)  $m^2 - 15 = -2m$

2)  $v^2 - 5v = -4$

3)  $a^2 = 3a + 18$

4)  $n^2 + 20 = -9n$

**Factor each completely.**

5)  $25n^2 - 40n + 16$

6)  $25x^2 - 1$

7)  $4x^2 - 12x + 9$

8)  $a^2 - 9$

**Solve each equation with the quadratic formula.**

9)  $6v^2 = -5v + 144$

10)  $10v^2 - 14 = 5v$

11)  $p^2 - 126 = -11p$

**Solve each equation by factoring.**

12)  $a^2 - 3a = -2$

13)  $4x^2 = -72 - 36x$

14)  $5m^2 + 70 = 45m$

15)  $n^2 = n + 42$

**Put the following equations into Vertex Form.**

16)  $v^2 + 8v - 9 = 0$

17)  $r^2 + 6r + 5 = 0$

18)  $n^2 + 16n + 60 = 0$

**Solve each equation by taking square roots.**

19)  $a^2 + 3 = 51$

20)  $v^2 + 6 = 13$

HW: 1-10 Due 5/19, 11-20 Due 5/20

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation by factoring.**

1)  $m^2 - 15 = -2m$

$\{3, -5\}$

2)  $v^2 - 5v = -4$

$\{1, 4\}$

3)  $a^2 = 3a + 18$

$\{-3, 6\}$

4)  $n^2 + 20 = -9n$

$\{-5, -4\}$

**Factor each completely.**

5)  $25n^2 - 40n + 16$

$(5n - 4)^2$

6)  $25x^2 - 1$

$(5x + 1)(5x - 1)$

7)  $4x^2 - 12x + 9$

$(2x - 3)^2$

8)  $a^2 - 9$

$(a + 3)(a - 3)$

**Solve each equation with the quadratic formula.**

9)  $6v^2 = -5v + 144$

$\left\{\frac{9}{2}, -\frac{16}{3}\right\}$

10)  $10v^2 - 14 = 5v$

$\left\{\frac{5 + 3\sqrt{65}}{20}, \frac{5 - 3\sqrt{65}}{20}\right\}$

11)  $p^2 - 126 = -11p$

$\{7, -18\}$

**Solve each equation by factoring.**

12)  $a^2 - 3a = -2$

$\{1, 2\}$

13)  $4x^2 = -72 - 36x$

$\{-3, -6\}$

14)  $5m^2 + 70 = 45m$

$\{7, 2\}$

15)  $n^2 = n + 42$

$\{-6, 7\}$

**Put the following equations into Vertex Form.**

16)  $v^2 + 8v - 9 = 0$

$\{1, -9\}$

17)  $r^2 + 6r + 5 = 0$

$\{-1, -5\}$

18)  $n^2 + 16n + 60 = 0$

$\{-6, -10\}$

**Solve each equation by taking square roots.**

19)  $a^2 + 3 = 51$

$\{4\sqrt{3}, -4\sqrt{3}\}$

20)  $v^2 + 6 = 13$

$\{\sqrt{7}, -\sqrt{7}\}$